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TI Interaction of \*\*\*integrins\*\*\* alpha v beta 3 and glycoprotein  
IIb-IIIa with fibrinogen. Differential peptide recognition accounts for  
distinct binding sites.

AU \*\*\*Smith J W\*\*\* ; Ruggeri Z M; Kunicki T J; Cheresh D A

SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1990 Jul 25) 265 (21)  
12267-71.  
Journal code: HIV. ISSN: 0021-9258.

## Pharmacological Report

### Receptor Inhibition Assay

Purified human integrins  $\alpha_v\beta_3$  and  $\alpha_v\beta_5$  from term placenta were adsorbed to microtitre wells and challenged with biotinylated complementary ligands - vitronectin (VN) for  $\alpha_v\beta_3$  and  $\alpha_v\beta_5$  in the presence of increasing amounts of test compounds.

Method: 1  $\mu\text{g ml}^{-1}$  biotin-ligand was incubated with 1  $\mu\text{g ml}^{-1}$  coated receptor in the presence of serially diluted EMD peptides. After 3 h at 30° C bound ligand was measured by anti-biotin - alkaline phosphatase detection.

Literature: Charo, I.F., Nannizzi, L., Smith, J.W. and Cheresh, D.A., J. Cell. Biol. 111, 2795-2800 (1990).

**Table I**

Q values (= quotient of IC<sub>50</sub> values of test compound and standard) for binding of biotinylated ligands to human placental  $\alpha_v\beta_3$  and  $\alpha_v\beta_5$

Sequence	Q VN: $\alpha_v\beta_3$	Q VN: $\alpha_v\beta_5$
cyclo-(Arg-Gly-Asp-DPhe-NMeVal)	0.3	0.1
Standard cyclo-(Arg-Gly-Asp-DPhe-Val)	1.00 (1.8 nM)	1.00 (266 nM)